

IN THE CLAIMS

1. (previously presented) An article of manufacture, comprising:
an energy absorber comprising an extruded plastic first layer having a first plurality of corrugations separated by a hinge from a second plurality of corrugations, wherein the length of the corrugations are longer than their widest cross-sectional width.
2. (Canceled)
3. (previously presented) The article of claim 1, wherein individual corrugations of the first plurality are nested within individual corrugations of the second plurality after actuation of the hinge.
4. (previously presented) The article of claim 3, wherein the first and second pluralities of corrugations differ from each other in at least one structural or compositional aspect.
5. (currently amended)The article of claim 4, wherein the at least one structural aspect is selected from height, base width, floor width, average width, cross-sectional shape, base layer thickness, wall thickness, floor thickness and or combinations thereof.
6. (currently amended)The article of claim 5, wherein cross-sectional shape is selected from square waveform, positive draft, negative draft, sinusoidal waveform, open loop shape, closed loop shape and or combinations thereof.
7. (currently amended)The article of claim 5, wherein the differing structural aspect characteristic results in frictional energy dissipating during an impact.
8. (currently amended)The article of claim 7, wherein the differing structural aspect characteristic is depth.

9. (previously presented) The article of claim 4, wherein the first and second pluralities differ in composition.

10. (currently amended)An article of manufacture, comprising:
an energy absorber comprising an extruded plastic first layer having a first plurality of corrugations and a an extruded plastic second layer having a second plurality of corrugations and wherein individual corrugations of the first plurality are nested within individual corrugations of the second plurality and wherein the first and second layers differ from each other in at least one structural or compositional aspect.

11. (cancelled) ~~The article of claim 10, wherein the second layer is an extruded plastic second layer.~~

12. (cancelled) ~~The article of claim 11, wherein the first and second layers differ from each other in at least one structural or compositional aspect.~~

13. (currently amended)The article of claim ~~10~~¹², wherein the at least one structural aspect is selected from height, base width, floor width, average width, cross-sectional shape, base layer thickness, wall thickness, floor thickness and or combinations thereof.

14. (currently amended)The article of claim 13, wherein cross-sectional shape is selected from square waveform, positive draft, negative draft, sinusoidal waveform, open loop shape, closed loop shape and or combinations thereof.

15. (currently amended)The article of claim 13, wherein the differing structural aspect ~~characteristic~~ results in frictional energy dissipating during an impact.

16. (currently amended)The article of claim 15, wherein the differing structural aspect ~~characteristic~~ is depth.

17. (previously presented) The article of claim 12, wherein the first and second layers differ in composition.
18. (previously presented) An energy absorbing structure, comprising:
a energy absorber comprising a first plastic layer having a first plurality of surface features and a second plastic layer with a second plurality of surface features wherein the surface features of one layer are nested within the surface features of the other layer and wherein the first and second layers differ from each other in at least one structural or compositional aspect.
19. (currently amended)The article of claim 18, wherein the at least one structural aspect is selected from height, base width, floor width, average width, cross-sectional shape, base layer thickness, wall thickness, floor thickness and ~~or~~ combinations thereof.
20. (currently amended)The article of claim 19, wherein cross-sectional shape is selected from square waveform, positive draft, negative draft, sinusoidal waveform, open loop shape, closed loop shape and ~~or~~ combinations thereof.
21. (currently amended)The article of claim 19, wherein the differing structural aspect ~~characteristic~~ results in frictional energy dissipating during an impact.
22. (currently amended)The article of claim 21, wherein the differing structural aspect ~~characteristic~~ is depth.
23. (previously presented) The article of claim 18, wherein the first and second layers differ in composition.
24. (previously presented) A method of manufacturing an energy absorber, comprising:
nesting individual surface features of a first plurality of surface features on a first plastic layer into individual surface features of a second plurality of surface

features on a second plastic layer, wherein the first and second layers differ from each other in at least one structural or compositional aspect.

25. (previously presented) The method of claim 24, further comprising extruding a first layer comprising the first plurality of surface features.

26. (previously presented) The method of claim 25, further comprising extruding a second layer comprising the second plurality of surface features.

27. (previously presented) The method of claim 24, further comprising extruding a first layer comprising the first and second plurality of surface features.

28. (previously presented) The method of claim 27, wherein the nesting step comprises actuating a hinge that separates the first plurality and second plurality of surface features.

29. (previously presented) A method of manufacturing an energy absorber, comprising:
extruding a first layer comprising a first and a second plurality of surface features, wherein the first and second plurality of surface features are separated by a hinge.

30. (Cancelled)

31. (Cancelled)

32. (previously presented) The method of claim 29, further comprising nesting individual surface features of the first plurality of surface features into individual surface features of the second plurality of surface features.

33. (previously presented) The method of claim 32, wherein the first and second plurality of surface features are formed with at least one differing structural or compositional aspect.